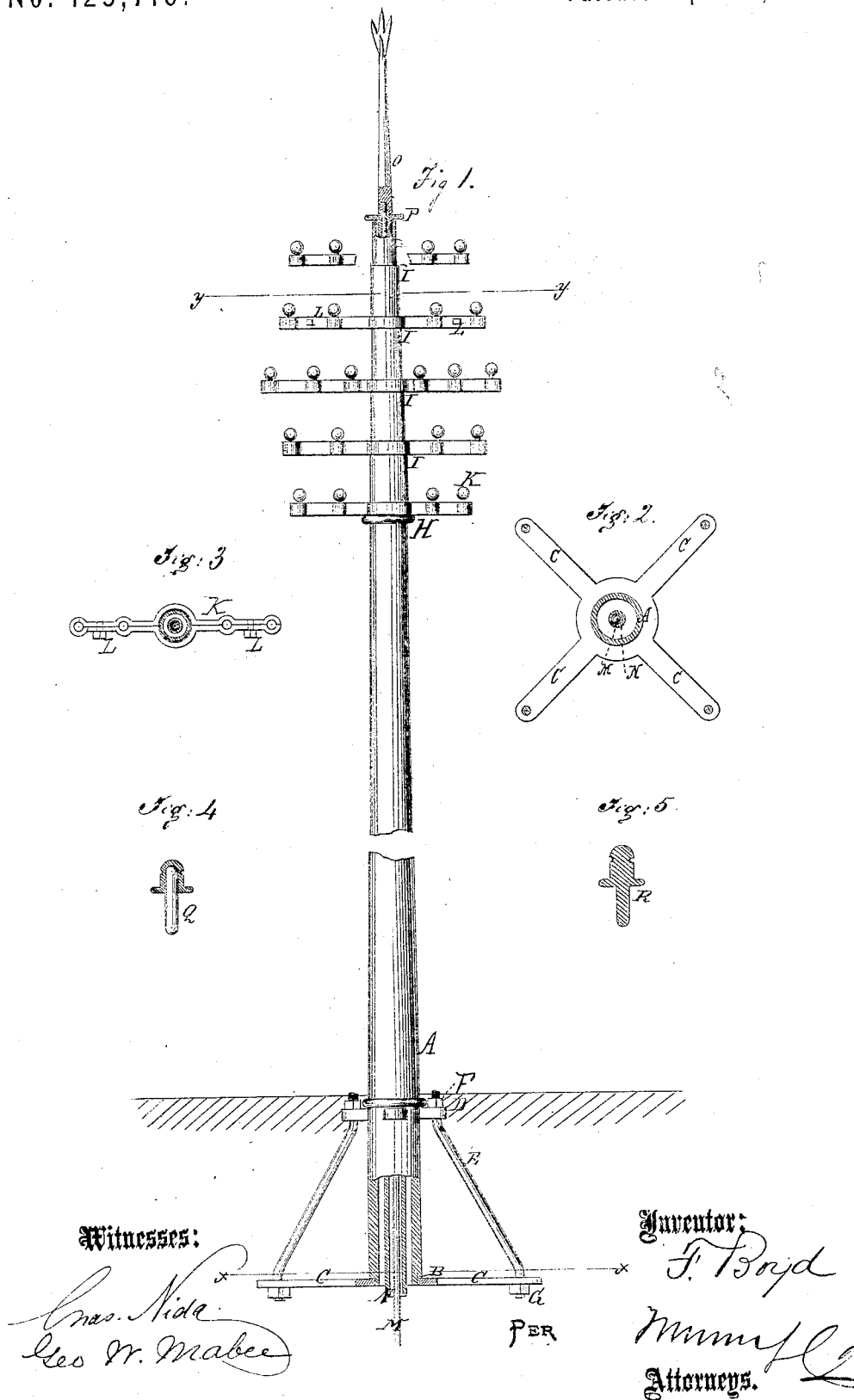


F. BOYD.
No. 125,716.

Improvement in Metallic Telegraph Poles.
Patented April 16, 1872.



UNITED STATES PATENT OFFICE.

FRANCIS BOYD, OF NEWBURG, NEW YORK.

IMPROVEMENT IN METALLIC TELEGRAPH-POLES.

Specification forming part of Letters Patent No. 125,716, dated April 16, 1872.

7

Specification describing a new and Improved Metallic Telegraph-Pole, invented by FRANCIS BOYD, of Newburg, in the county of Orange and State of New York;

My invention relates to improvements in metallic telegraph-poles; and consists in constructing such a pole with collars for supporting horizontal arms which carry the insulators, in the means of connecting it with the base-piece, and in the arrangement of a lightning-rod or conductor.

Figure 1 is an elevation of my improved pole, with some parts sectioned. Fig. 2 is a cross-section on the line *xx*. Fig. 3 is a transverse section on the line *yy*. Fig. 4 is a section of the common wood pin and glass insulators for the wires, and Fig. 5 is a section of a solid India-rubber insulator which I propose to use.

Similar letters of reference indicate corresponding parts.

A is the cast-metal tube; B, the step; and C, the arms thereof, for bedding in the earth to support the pole; D, the ears for the braces E, said ears being cast on the pole and the braces being fitted through them, with screen-nuts F above for straining them to adjust the pole to a vertical position. Said braces may be made fast to the arms, or pass through them and be secured by nuts G below. H is the collar or ring cast on the pole for holding the lowermost ring; and I, shoulders for the other arms, formed by successive reductions of the size of the pole for the other arms. K represents the arms, which may be made of metal bars, with a large hole at the center to fit on the pole snugly above the shoulders, each arm having its hole corresponding in size to that of the pole above the particular shoulder whereon it is to rest, said arms either being made in

one piece and put on over the top of the pole, or it may be divided in two parts longitudinally and vertically, and bolted together by bolts L. M is the lightning-rod, and N the insulating-tube. Said rod will project above the top of the pole, as at O, being insulated by an India-rubber cap, P, fitted water-tight on the top of the pole, and the hole through which the rod passes being packed tightly to prevent the water leaking out. The said arms will have holes for holding the wood pins Q or India-rubber insulators R, which may screw into the holes of the solid arms, and they may either screw into the divided arms, or they may be made larger below the arms and be held by such enlargements when clamped by said divided arms.

The arms should be galvanized; the parts below ground should be coated with coal-tar, and the parts of the hole above ground should be scaled and primed with red lead.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

1. A tubular cast-metal telegraph-pole, having the collar H and shoulders I for supporting the arms, formed in the manner described.

2. The said cast-metal pole, provided with ears D, and stepped in and braced to a metal bed-piece, B, with arms C, by adjusting braces E, substantially in the manner described.

3. The lightning-rod M, insulating-tube N, cap P, and extension O, all combined and arranged with the pole, substantially as specified.

FRANCIS BOYD.

Witnesses:

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